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Trolling: The Effects of Social Influence on Online Discrimination

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Abstract

With the increased use of online communication in our everyday lives, there is a growing need to understand social influence in such settings. The current research posits that online social norms can influence readers' anti-social and pro-social behaviours online, specifically individual expressions of prejudice. Participants read an online article proposing an increase to international student scholarship funding, then were randomly placed in one of two normative conditions where they read Anti-Prejudiced or Pro-Prejudiced comments allegedly placed by other users. Participants then left their own comments before completing a self-report prejudice questionnaire and an implicit association test (IAT). Social norms created by the fictitious comments influenced respondents to comment with more or less bigoted sentiments aligned with the fictitious social norm. Participants reading prejudiced online comments showed increased implicit and explicit prejudice, while those reading anti-prejudiced online comments showed the reverse. Participants' internal and external motivations to control prejudice were also measured and hypothesised to moderate the effects of social norms on bias expressions. However, this hypothesis was unsupported with participants' internal and external motivations to control prejudice inconsistently moderating the effects of the social norm on their prejudice expressions. These findings suggest possible avenues for social change in online environments, and criteria to help establish more positive online social norms.

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The Effects of Social Influence on Online Discrimination

The number of internet users has increased over five fold in the last decade (Internet World Stats, 2012) with the fastest growing demographic of Twitter users being 55 and over (Global Web Index, 2013). In their annual investor report, Facebook CEO, Mark Zuckerberg, commented that people have become more open and comfortable with their online presence than ten years ago, with over 618 million daily users worldwide on social networking sites alone (Facebook, 2013). This demonstrates the expanding spectrum of online communicators, and how online social communications have become a way of life for wide range of people. The increasing numbers are indicative of the internet has becoming a primary avenue for global communications, with users and group members from different backgrounds and ethnicities free to express their opinions online (Haines, Hough, Cao, & Haines, 2012).

Computer-Mediated Communications (CMC) (such as online forums, Facebook and Twitter), offer the opportunity for new avenues of communication between people, especially those who have difficulties expressing themselves in face-to-face scenarios (Postmes & Spears, 2002; Haines et al., 2012; Huff & King, 1988; Kiesler & Sproull, 1991, 1992). However, offensive comments or replies can turn discussions uncivil, impeding the growth of the internet as a viable avenue for constructive discourse (Papacharissi, 2004) potentially leading to increased animosity between commenters (Anderson, Brossard, Scheufele, Xenos, & Ladwig, 2013). Instead of the optimistic environment described by Zuckerberg (Facebook, 2013), websites from various fields now struggle to deal with anti-social and prejudiced behaviours from readers (Popular Science, 2013). To combat this, some sites are encouraging users to sign in with personally identifying information (e.g. YouTube); hiring ‘community managers’ to moderate comments as seen on the New York Times website (Anderson et al., 2013); or choosing to completely dismantle their reader comment sections altogether (e.g. Popular Science, 2013). Debate has arisen as to whether comfort and lack of accountability

provided by the internet allows users to feel empowered and, in some cases, enabled users to utilise the internet as an outlet for negative behaviours (Lea, Spears, & De Groot, 2001).

Under what conditions do online communications facilitate pro-social versus anti-social tendencies? This research examines how social norms established by the online comments of other users can influence individual prejudicial attitudes toward social out-groups.

The Influence of Social Norms on Prejudice

Previous research in social psychology may provide insight into how social norms established in an online setting may elicit pro-social versus anti-social tendencies. Early texts on crowd psychology viewed crowds as negative, destructive entities, where an individual's sense of morality and conscience diminished upon entering a crowd, forming a unique identity and culture for that group, referred to as a norm (Le Bon, 1895). To Le Bon (1895), being lost amongst a crowd afforded the chance for an individual to break free from external pressures to uphold responsible societal norms. This allowed them to become open to impulsive and anti-social influences.

Various studies have since found group norms to be a key component in determining behavioural outcomes of group members. Individuals will look to others in their group for guidance on socially acceptable responses and then mimic the behaviours and attitudes of the group's salient norm (Bandura, 1986; Blanchard, Crandall, Brigham, & Vaughn, 1994; Blanchard, Lilly, & Vaughn, 1991; Cialdini & Trost, 1998; Deutsch & Gerard, 1955; Pettigrew, 1991; Sherif, 1936; Zitek & Hebl, 2007). It was found that the more attractive or influential a group appeared, the more powerfully the individual would adopt the group norm (Tajfel, 1978; 1982). In the case of group norm adoptions of prejudice, prejudicial attitudes are highly dependent on how intergroup differences are made salient (Brown, Condor, Matthews, Wade, & Williams, 1986). Groups that focus on intergroup conflicts or perceived

conflicts create norms that lead to intergroup discriminatory behaviours (Le Bon, 1895; Jackson, 2002). Conversely, groups that focus on egalitarian values show increased intergroup affections (Blanchard et al., 1991; Blanchard et al., 1994; Gergen, Gergen, & Barton, 1973). This indicates that individual prejudicial attitudes may actually be a reflection of the attitudes of their immediate group norms (Plant & Devine 1998).

The influence of social norms can be a double-edged sword if the group's prejudicial attitudes are more negative than an individual's prejudicial attitudes, as individuals can also lower their prejudicial attitudes to match the perceived group norm (Schultz, Nolan, Cialdini, Goldstein, & Griskevicius, 2007). Existing research on social influence predicting prejudice expressions has so far been promising, indicating that influences of social group norms can be quite effective for predicting prejudices and discriminations (Crandall, Eshleman, & O'Brien, 2002; Paluck, & Green, 2009). For example, in a study undertaken by Blanchard et al. (1994), a confederate would voice either pro-prejudiced or anti-prejudiced opinions when researchers asked participants to rate prejudicial questions about Blacks. Having confederates stand in close physical proximity to participants and having the confederate voice strongly pro-prejudiced or anti-prejudiced opinions had more influence on the participant's prejudice expressions (Latane, 1981). This demonstrated that participants were more likely to alter their identity to fit with the salient group norm, suggesting that group identity can override individual identity (Postmes, Spears, & Lea, 2000). In addition, Stangor, Sechrist, and Jost (2001) also found they could influence prejudicial attitudes of university students toward Black student peers by informing participants how other fictitious students responded on a discrimination questionnaire. Although research on social norm effects in predicting intergroup prejudice has been explored in face-to-face scenarios, little research has addressed the influence of group norms in an online environment – a gap which the current study aims to address.

Online Social Influence Effects

Computer Mediated Communication (CMC) environments often lack the physical aspects of traditional face-to-face interactions, such as facial expressions and vocal fluctuations. This suggests that to establish a strong social influence in a CMC environment, responses from other commenters need to be clearly in agreement with each other (Woong Yun & Park, 2011), setting the foundations of a clear group norm. CMC literature has shown that some users in these environments are more susceptible to normative influences than traditional face-to-face settings (Postmes, Spears, & Lea, 1998; 1999). For example, participants in one study first completed a risk assessment questionnaire individually, and were then placed in groups to discuss the same risk assessment questions in both face-to-face meetings and CMC discussions. Group conclusions deviated further from an individual's own conclusion when the issue was discussed through CMC than when the issue was discussed in face-to-face meetings (Siegel, Dubrovsky, Kiesler, & McGuire, 1986). This indicates that people are influenced in different ways through CMC than communication in face-to-face meetings. The authors posit that the extra effort required to read and type responses to the discussion comments may be a determining factor in why the CMC conclusions deviated from the face-to-face conclusions.

In CMC environments where individuals are physically isolated from other group members, having other CMC group members show supporting opinions can help strengthen and defend group norms from influences of more powerful (status-wise) out-groups. However, without support from peers, an individual will be more susceptible to the influences of the out-group (Spears, Lea, Corneliussen, Postmes, & Ter Harr, 2002). This evidence supports the idea that CMC groups are different from face-to-face groups, and feedback from CMC group members can provide empowering social support among its members. It should be mentioned though, that many of these studies were performed over a

decade ago prior to the emergence of social media and networking. Therefore, to explore online anti-social behaviours in the modern environment, the current research will expand upon prior research on the relationship between social influences and prejudice expressions by exploring how online comments can form influential norm conditions, and how that affects prejudicial comments people are willing to post online.

Implicit versus Explicit Prejudice in Contemporary Society

Beyond exploring the effects of social influences on prejudice expression in the immediate online environment, the current study also aims to determine whether the influences of an online social norm can become internalized and impact an individual's implicit or unconscious attitudes. Postmes et al. (2000) posited that the influences of a group norm are specific to a particular group. This means, even if an individual adopts a group norm, this should not generalise to future tasks or interactions outside the group. Thus, the question is raised: can social norms surrounding prejudice expression impact an individual once they have moved away from the specific online context? Such a question is important if one considers CMC as a means for prejudice reduction.

The implementation of prejudice reduction interventions is an expensive task, with North America alone spending billions of dollars annually on such programs (Hansen, 2003). Although it appears that prejudice expressions in many societies around the world have declined over the last half-century (Crandall et al., 2002), it is difficult to determine whether this decline is due to increased social consciousness of individuals, or because of egalitarian shifts in societal norms (Crandall et al., 2002). Apparently, even after the amount spent on creating and implementing prejudice reduction interventions, they are not always effective and can sometimes even increase discrimination by highlighting intergroup differences (Legault, Gutsell, & Inzlicht, 2011).

Part of this confusion may be an artefact of using explicit self-report measures in prejudice expression research (Crandall et al., 2002). A major limitation of self-report measures is the susceptibility to social desirability biases from participants who try to appear more egalitarian by consciously responding to explicit prejudice questionnaires in a pro-social manner (Greenwald, Poehlmann, Uhlmann, & Banaji, 2009; Sinclair, Lowery, Hardin, & Colangelo, 2005). Therefore, it is difficult to ascertain whether these egalitarian social norms are actually being internalised on a subconscious level, or if they have been adopted at face value to fit with broader societal norms. When Greenwald, McGhee, and Schwartz (1998) studied differences in explicit and implicit prejudice measures, they found the use of implicit measures revealed completely different prejudice ratings compared to explicit self-report ratings. The study indicated that people reported egalitarian responses on self-reported Prejudice toward Blacks scales, but held strong subconscious prejudices towards Blacks when implicit associations were tested. Greenwald et al. (1998) further demonstrated that Implicit Association Tests (IAT; Greenwald et al., 1998) were immune to the effects of individual self-presentation and measured different constructs than explicit prejudice self-report scales. Further, Greenwald, Poehlmann, Uhlmann, and Banaji (2009) demonstrated that the inclusion of such implicit measures expanded upon the predictive validity of using explicit self-reports alone, especially in regards to socially sensitive topics such as racial and intergroup behaviours. Therefore, any implicit prejudices may become evident through an IAT with such scores revealing variance in subconscious differences in associations. In recent years, data from nearly a hundred studies revealed that implicit attitudes and stereotypes predict discriminatory behaviours in job recruitment, non-verbal interactions, and voting, among other behaviours (for a review, see Greenwald et al., 2009). As such, the current study will account for the impact that online social norms have on readers' subsequent implicit and explicit prejudices.

Moderating Effects of Internal and External Motivations to Control Prejudice on Prejudice Expression

Plant and Devine (1998) argued that each individual is motivated to control their expressions of prejudice from either internal (Internal Motivations) or external (External Motivation) sources. Plant and Devine (1998), and Abrams (1994) assert this may be due to individual prejudice suppression tactics to avoid feelings of shame or guilt. The internal and external motivations to control prejudice approach suggests that internally motivated individuals are more likely to respond to prejudice measures in an egalitarian manner, regardless of pro-prejudice or anti-prejudice group norms, due to the self-proposed importance they place on being anti-prejudiced (Glaser & Knowles, 2008; Legault & Green-Demers, 2012). Individuals who rate themselves high in internal motivations tend to display less explicit and implicit biases, however individuals who report low internal motivations tend to lack consistency between their implicit and explicit prejudice responses (Hausman & Ryan, 2004; Devine, Plant, Amodio, Harman-Jones, & Vance, 2002). Displays of prejudice by externally motivated people, on the other hand, are mainly determined by their social context and self-reported prejudicial attitudes may change depending on the surrounding environment (Plant & Devine 1998; Crandall et al., 2002). Individuals who rate themselves high in both internal and external motivations tend to only be able to regulate their explicit prejudice responses but not their implicit prejudice responses (Devine et al., 2002). Although the effects of prejudice suppression are well documented, little research has examined the effects of internal and external motivations to control prejudice on social norms and prejudice expressions (Legault & Green-Demers, 2012). Therefore, to expand the prejudice expression paradigm of why certain people are more influenced by social norms than others, the influences of an individual's internal and external motivations to control prejudice will also be measured.

Summary of the Present Research

The current study will explore how anti-prejudiced and pro-prejudiced online comments create social norms that influence the prejudicial attitudes of readers. Prejudice expressions of participants will be measured through online responses to anti-prejudiced or pro-prejudiced comments, followed by implicit and explicit measures of prejudice. To test for social influence effects, the current study uses a combination of Legault et al's. (2011), Spears et al's. (2002), and Blanchard et al's. (1994) paradigms to create an online environment in which participants were presented with an online article by a fictitious research firm conducting market research on a new government education plan specifically targeting international tertiary students from Asia. The article described the importance of Asian international students to the New Zealand tertiary education market and economy, and then described a recent investigation which uncovered a ghost-writing service helping some Chinese-speaking students cheat on tertiary assignments (all based on recent real-world news reports). Participants were then randomly assigned to a social norm condition where other fictitious commenters had placed either anti-prejudiced or pro-prejudiced feedback regarding the news article and government policy. Participants then placed their own comments about the policy, and each participant's comment was later rated for their level of prejudice expressions. By changing the social group norms, individuals in the anti-prejudice norm condition are hypothesised to be more likely to respond in a more egalitarian manner and show less prejudice in their comments; while individuals in the pro-prejudice norm condition will show significantly more biased responses than those in the anti-prejudice norm condition. To test for residual effects from the anti-prejudice and pro-prejudice conditions (as outlined above), a set of explicit self-report prejudice questionnaires along with an IAT measuring associations of White/Asian faces with Good/Bad words, follows the online section. This will be used to determine if the CMC group norm adoption of prejudice

expressions lasts beyond the immediate influences of the group, influencing the individual's bias responses.

In addition, the current study will look to expand the prejudice reduction and social norm literature by testing internal and external motivations to control prejudice as potential moderating variables for how social norms impact prejudice expression in the CMC environment. It is hypothesised that internal and external motivations to control prejudice will moderate the effects of the situational norm, such that when an individual is high in internal motivations and low in external motivations, the individual will report strong anti-prejudice responses in the anti-prejudice social norm condition and more egalitarian responses in the pro-prejudice norm condition. By contrast, individuals low in internal motivation, regardless of external motivation, is expected to report either anti-prejudice or pro-prejudice responses to match the anti-prejudice or pro-prejudice situational norm conditions respectively. Individuals high in both internal motivations and external motivations are expected to respond in an egalitarian manner in the explicit questionnaire but will be influenced by the social norm condition in the implicit prejudice measure.

Method

Participants

One hundred and thirty seven participants took part in the study (98 female, 37 male, 2 undisclosed). Participants were recruited through flyers posted around the University of Canterbury campus, or volunteered through the University's Psychology department subject pool. The sample comprised of 70 first year Psychology students, 64 students from various disciplines around the university, 1 faculty member, and 2 unknown. First-year Psychology students were given course credit for taking part in the study, while other participants were given \$10 gift vouchers as compensation for their time. Ages of participants ranged from 18

to 50 ($M = 22.79$, $SD = 6.68$). The ethnic backgrounds of the participants were NZ European (80), Asian (21), NZ Maori (8), European (8), NZ Asian (7), Pacific Island (4), Indian (3), and other (6).

Materials

Social Norm Manipulation. Participants were presented with a Marketing Survey website, which was created specifically for this study using the website creator within www.weebly.com. To avoid suspicion about the authenticity of the website, the domain name www.digitalpoll.org was created for the alleged research website. The marketing research website explained that the New Zealand Tertiary Education Commission (TEC) were planning to increase scholarship and funding support for international students, with a heavy emphasis towards students from East Asia, which is currently New Zealand's largest international student sector. However, due to recent claims of Chinese-speaking students being caught cheating in their tertiary studies, the public perception of the proposal is currently uncertain. Due to this uncertainty, the TEC has hired an external research firm to gather feedback from universities across New Zealand to ascertain the current stance of public opinion toward the proposed funding increase. After reading the article, participants were asked to offer their own comments. However, before they could place their comments, participants would have to scroll past comments placed by the experimenter masking as other students. The news article remained the same across both conditions (Appendix A), with only the comments that followed the article differing.

The social norm environment was created using 24 pre-selected comments (12 comments in the Anti-Prejudice norm, Appendix B; 12 comments in the Pro-Prejudice norm, Appendix C). To avoid suspicion, comments were re-entered every fortnight to keep the time stamps on the comments updated and recent. All comments were copied verbatim from

responses that had been made on a recent New Zealand news website (Stuff, 2013) about a Chinese-speaking firm that were ghost-writing tertiary assignments for a fee. User names of the commenters were all fictional. A spectrum of comments was chosen to present differing levels of anti-prejudiced or pro-prejudiced expression to maintain ecological validity. In the anti-prejudice condition, all 12 comments were supportive of Asian international students and cautioned people not to generalize negative feelings toward all Asian people (e.g., “The foreign fee paying students – most of whom are Chinese – are some of the hardest working students at Uni”, and “I think some parts of this news are just exaggerations and lots of lazy ppl just found a perfect excuse for their gradually losing competitiveness”). By contrast, in the pro-prejudice condition, all 12 comments expressed dissent toward increasing support for Asian students (e.g. “What we stupid, naïve Kiwis need to realise is this behaviour is perfectly normal and acceptable in the countries these students come from. Corruption, bribery and deceit are a way of life in these cultures” and “There is a lot of cheating that goes on at uni... I’m sure Western students attempt to cheat as well... but every time I have seen it done it has been Chinese students”).

Measures

Explicit Prejudice Responses. The explicit prejudice toward Asians questionnaire included 18 items from a combination of the Attitude Toward Blacks scale (Brigham, 1993), the Modern Racism Scale (McConahay, 1986), and the Attitudes Towards Hispanics scale (Plant, Butz, & Tartakovsky, 2008). These items were adapted to assess prejudicial attitudes toward Asians (i.e. by replacing ‘blacks/Hispanics’ with ‘Asian’) on 1-7 Likert scales where higher numbers indicated greater expressions of prejudice.

Two semantic differential scale items were also included (Ho & Jackson, 2001); “How positive do you feel towards Asians”, and “How much do you like Asians”, which

were rated on a seven-point Likert scale, with higher scores indicating more positive attitudes towards Asians. A 'Feeling Thermometer' was included, which asked participants to rate on a 1 – 100 scale how they felt towards Asians, with lower scores indicating cold or unfavourable feelings, and higher scores indicating warm or favourable feelings. Unlike other dependent variables, the higher the ratings of the two semantic differential items and the Feeling Thermometer equate to greater affinity towards Asians.

Implicit Prejudice Responses. Implicit prejudice toward Asians was assessed using a race Implicit Association Test (IAT; Greenwald et al., 1998) created in Inquisit software (Draine, 1999), following the procedure described by Greenwald, Nosek, and Banaji (2003). The IAT consisted of two critical blocks – a congruent and an incongruent block. In each block, a selection of six Asian faces (3 male and 3 female), six White faces (3 male and 3 female), six positive words (e.g. "kindness"), or six negative words (e.g. "sickness") would individually appear in the centre of the screen. The participant's task was to indicate which category (good/bad & Asian/White) the photo/word came from. In the congruent block, White faces and good words shared a response key, and Asian faces and bad words shared a response key. In the incongruent block the positive and negative word responses switched response positions so that positive words and Asian faces shared a response key and the negative words and White faces shared a response key. Participants responded by pressing either the 'a' key with their left hand for the left responses or the '5' (num-pad) key with their right hand to represent the right responses. Whenever a participant responded incorrectly, an "X" message would appear to inform the participant that they responded incorrectly and were then required to press the correct response key to advance. The time between the stimuli appearing on the screen and the participant's correct response time was recorded. Mean response times of each block were then used to determine the implicit prejudices of each participant. IAT blocks were provided in a counterbalanced order such that half the

participants did a congruent block first, while the other half did an incongruent block first. Prior to each testing block, a trial block with 20 practice trials was used to make sure participants understood the instructions for each block. Differences in congruent/incongruent block reaction times were later used to form an IAT D score, which outperforms conventional IAT algorithms (Greenwald et al., 2003). The IAT D score compares response times of individuals against deviations from their own response times to create a scale unit which reduces contamination from external factors. The difference between each participant's congruent block response times and their incongruent block response times were calculated, with positive deviations in response times showing a stronger association with White-Good/Asian-Bad relative to Asian-Good/White-Bad (i.e. a more prejudiced response). Negative deviation scores indicated stronger associations with Asian-Good/White-Bad relative to an individual's White-Good/Asian-Bad associations (i.e. a less prejudiced response).

Motivations to Control Prejudice. Participants completed a 10 – item motivation to control prejudice scale (Plant & Devine, 1998), which identified the self-rated internal and external motivations to control prejudice of each participant. Each item in the scale was rated on a 1 – 9 Likert scale, with five internal motivations to control prejudice items (e.g. “I am personally motivated by my beliefs to be non-prejudiced toward Asian people.”) and five external motivations to control prejudice items (e.g. “I try to act non-prejudiced toward Asian people because of pressure from others.”). Higher scores on either scale correspond to either a higher internal or external motivation to control prejudice.

Design

The independent variables were the two social norm conditions. The anti-prejudice condition had 69 participants, and the pro-prejudice group had 68 participants. The dependent

variables measured prejudice expressions in the forms of an IAT D score, comment ratings as a response to the online article, and a self-report prejudice questionnaire. The study was reviewed and approved by the University of Canterbury Human Ethics Committee.

Procedure

The experiment was conducted in two adjoining rooms in the Psychology department at the University of Canterbury; the first room contained only tables and chairs, while the adjoining room contained a collection of four partitioned cubicles each with its own computer station. All data for each participant were collected within one session. In all conditions, each participant was informed that they would be completing a Social Attitudes towards Contemporary Issues in New Zealand study, but due to a Psychology department policy, the study did not meet the required 30 minute length required to obtain either the gift voucher or course credit, so a second study would follow the first.

Each participant was given a unique code to keep their information anonymous and asked to complete the Social Attitudes questionnaire where items from the Motivation to Control Prejudice scale (Plant & Devine, 1998) was intermixed with items from the Attitudes Toward Older Worker scale (Malinen & Johnston, 2013), and the Modern Sexism Scale (Swim, Aikin, Hall, & Hunter, 1995) to attempt to mask the true purpose of the study from participants. Completed forms were then placed in a drop box and participants were escorted into the adjoining room where the “second” study was completed.

Each participant was seated at a partitioned work station and introduced to the (ostensibly unrelated) second study, presented as an International Student Education study that was being conducted by an external data collection agency on behalf of the New Zealand Tertiary Education Commission. A new set of consent forms were provided to reinforce the illusion that the International Education study was separate from the previous study. The

participants were then linked to the marketing research website where they read the news article described earlier. After reading the article, participants were asked to offer their feedback about the government plan. To do so, participants were required to scroll past each of the norm conditioning comments.

As in a real-world scenario, participants sat individually in front of their respective computers and were instructed not to communicate with other participants to present similar feelings of solidarity. After placing a comment on the website, participants completed the IAT and the self-report questionnaire, the orders of which were counterbalanced between subjects. To ensure that data obtained were not compromised by participants guessing the true purpose of the study, each participant completed a short post-experimental questionnaire with two questions asking what they thought was the purpose of the study and if they thought the studies were linked in any way.

Results

A visual inspection of the data showed no signs of skewness or kurtosis. However, the Shapiro-Wilk's analyses of distributions for various DVs in the anti-prejudice and pro-prejudice conditions were not normally distributed (Shapiro-Wilk's; Comment Ratings, $p = 0.020 - 0.003$; Social Distance, $p < 0.001 - 0.001$; Feeling Thermometer, $p = 0.001 - 0.009$; Positivity Ratings, $p < 0.001 - 0.008$).¹

Responses in each norm condition were not affected by participant gender or participant ethnicity (all p 's $> .16$) indicating that responses were not moderated by demographic factors. Demographic factors were not considered in further analyses. The post-experimental questionnaire asking participants about the purpose of the study fell within an

¹ To account for violations of normality in the dependent variables, non-parametric, independent samples Mann-Whitney U tests were used for those variables in addition to the standard independent sample t-tests.

acceptable range ($M = 2.36$, $SD = 0.75$) with none of the participants able to decipher the true purpose of the study.

Hypothesis 1a: The Effect of Social Norms on Prejudicial Comments

Comment Ratings. The online comments placed by the participants were graded on a 1 – 7 scale where 1 indicated pro-Asian (e.g. “I think it is really positive to be trying to boost the number of Chinese coming to study in New Zealand. It is helping our economy but also pushing to establish positive relationships with the Chinese. I believe everyone should have a fair shot regardless of their ethnicity”); 4 indicated neutral or non-related (e.g. “I do not think that cheating is limited to any particular ethnic group”); and 7 indicated anti-Asian (e.g. “Chinese people have a bad rep for a reason”). Scores were graded by two independent postgraduate-level psychology students whose ratings demonstrated a strong correlation ($r_s = .69$). The two ratings were indexed, with the new variable simply termed ‘Comment Rating’. Two extreme outliers were found in the Comment Rating distributions (i.e. 3 SD above or below the mean), and were removed for all the Comment Rating analyses.

An independent samples t-test demonstrated that participants in the anti-prejudice social norm group ($M = 3.07$, $SD = 1.31$) responded with less prejudiced comments than those in the pro-prejudice group ($M = 4.31$, $SD = 1.38$; $t(130) = 5.27$, $p < .001$, $d = 0.92$ (Table 1). Thus supporting the hypothesis that social norms can influence online prejudicial comments.

Hypothesis 1b: The Effect of Social Norms on Explicit Prejudice Questionnaires

Exploratory Factor Analysis of Explicit Prejudice Questionnaire. Items in the explicit prejudice questionnaire requiring reverse coding were recoded so that higher scores would equate to greater self-reported prejudice toward Asians. Missing data was random, therefore a mean replacement was conducted for missing scores. The feeling thermometer

was not included in the factor analysis due to this measure using a different rating scale. Semantic differential items were also excluded from the factor analysis as these items measured positive feelings and attitudes towards Asians, rather than explicit bias expressions. The two semantic differential items showed a good correlation ($r = .77$) and were indexed into a Positivity Rating which will be discussed in a later section. Exploratory factor analysis of the 18 explicit prejudice questionnaire items using principal components analysis with varimax rotation was used. A KMO (0.85) and Bartlett's test ($p < .001$) indicated the data were factorable.

Four factors were shown to have eigenvalues greater than 1, with a total variance of 57.70% explained. The item cluster of Factor 1 described a common theme of 'Social Distance' from Asian people, while items in Factor 2 explained expressions of prejudice which was termed 'Bias Expressions'. Factors 3 and 4 had items that did not belong in any meaningful index possibly because these items were less relevant to the New Zealand context (e.g. "Asian people are demanding too much too fast in their push for equal rights") when compared to their American origins. Additionally, the items in these factors had poor reliabilities ($\alpha < .59$) and were therefore removed from further analysis.

Due to a small sample size, factor loading cut-off was increased to 0.50 to compensate for multiple loadings as recommended by Field (2009). Cronbach's alphas for Social Distance (7 items; $\alpha = 0.86$) and Bias Expressions (4 items; $\alpha = 0.76$) showed good reliability, with no items needing removal from either factor. Factor loadings can be found in Appendix D.

Social Distance

One outlier was found in the Social Distance measure and was removed from the Social Distance analysis. Independent samples t-test indicated that those in the anti-prejudice

norm condition ($M = 1.90$, $SD = 0.91$) rated themselves as more personally comfortable being near Asians than those in the pro-prejudice condition ($M = 2.44$, $SD = 1.12$; $t(132) = 2.69$, $p = .01$, $d = 0.46$).²

Bias Expressions

Participants influenced by the anti-prejudice norm ($M = 2.62$, $SD = 1.24$) had lower expressions of bias towards Asians than those exposed to pro-prejudice norms ($M = 3.22$, $SD = 1.23$; $t(133) = 2.83$, $p = .01$, $d = 0.49$).

Feeling Thermometer and Positivity Ratings

The Feeling Thermometer had two outliers and Positivity ratings had one outlier. Each outlying case was removed from their respective analyses. Fifteen participants did not indicate a feeling thermometer score. A comparison of the Feeling Thermometer scores between anti-prejudice ($M = 78.15$, $SD = 16.86$) and pro-prejudice ($M = 71.26$, $SD = 15.53$) conditions showed a higher affinity towards Asians for those in the Anti-Prejudice norm group ($t(120) = 2.17$, $p = .03$, $d = 0.39$).³

Positivity ratings were also higher in the anti-prejudice ($M = 5.84$, $SD = 1.05$) than pro-prejudice social norm ($M = 5.25$, $SD = 1.07$; $t(130) = 3.34$, $p = .001$, $d = 0.58$), indicating more positive feelings toward Asians for participants in the anti-prejudice norm condition than participants in the pro-prejudice norm condition.⁴

² Independent samples Mann-Whitney U test supported this, with the Anti-Prejudice norm group reporting lower Social Distance scores (median = 1.71) than the Pro-Prejudice norm group (median = 2.29), $U = 2,905$, $p = 0.003$.

³ Independent samples Mann-Whitney U test supported this, showing that participants in the Anti-Prejudice condition (median = 80) reported significantly greater affinity towards Asians than the participants in the Pro-Prejudice condition (median = 67), $U = 1,362$, $p = 0.022$.

⁴ The independent samples Mann-Whitney U test still showed a significant difference in Positivity Ratings between the Anti-Prejudice norm group and the Pro-Prejudice norm group, $U = 1480.50$, $p = 0.002$. With the Anti-Prejudice group rating more positive feelings towards Asians (mean rank = 76.07) than the Pro-Prejudice group (mean rank = 55.78)

Hypothesis 1c: The Effects of Social Norms on Implicit Prejudice.

An IAT D score was created using the algorithm described by Greenwald et al. (2003). The anti-prejudice norm ($M = 0.27$, $SD = 0.41$) demonstrated lower levels of implicit bias than participants in the pro-prejudice norm ($M = 0.41$, $SD = 0.43$; $t(134) = 1.96$, $p = .05$, $d = 0.34$).

Table 1: Descriptive Statistics and significance of independent means t-tests for Anti-Prejudice and Pro-Prejudice social norm conditions for each Dependent Variable.

Measure	Anti-Prejudice Norm			Pro-Prejudice Norm		p
	Range	Mean	SD	Mean	SD	
Comment Rating ¹	1 - 7	3.07	1.31	4.31	1.38	< 0.001
Social Distance ¹	1 - 7	1.90	0.91	2.44	1.12	0.01
Bias Expressions ¹	1 - 7	2.62	1.24	3.22	1.23	0.01
Feeling Thermometer ²	1 - 100	78.15	16.86	71.26	15.53	0.03
Positivity Rating ²	1 - 9	5.84	1.05	5.25	1.07	<0.01
IAT D ¹	n/a	0.27	0.41	0.41	0.43	0.05

Note: ¹ = higher ratings represent more prejudice toward Asians. ² = higher ratings represent greater affinity towards Asians.

Hypothesis 2: Moderating Role of Internal and External Motivations to Control Prejudice

Items requiring reverse coding in the Motivations to Control Prejudice scale were also recoded such that higher scores would indicate either higher self-rated internal motivations or external motivations. The internal reliability for both subscales was high ($\alpha = .90$ for internal motivation; $\alpha = .82$ for external motivation). A Levene's test was non-significant indicating homogeneity of variance ($ps > 0.06$). To test for moderating effects of Internal and External Motivations on the social norm, a regression analysis was conducted using Hayes' (2013) PROCESS module with Internal and External Motivations as potential moderators (conceptualised in Figure 1).

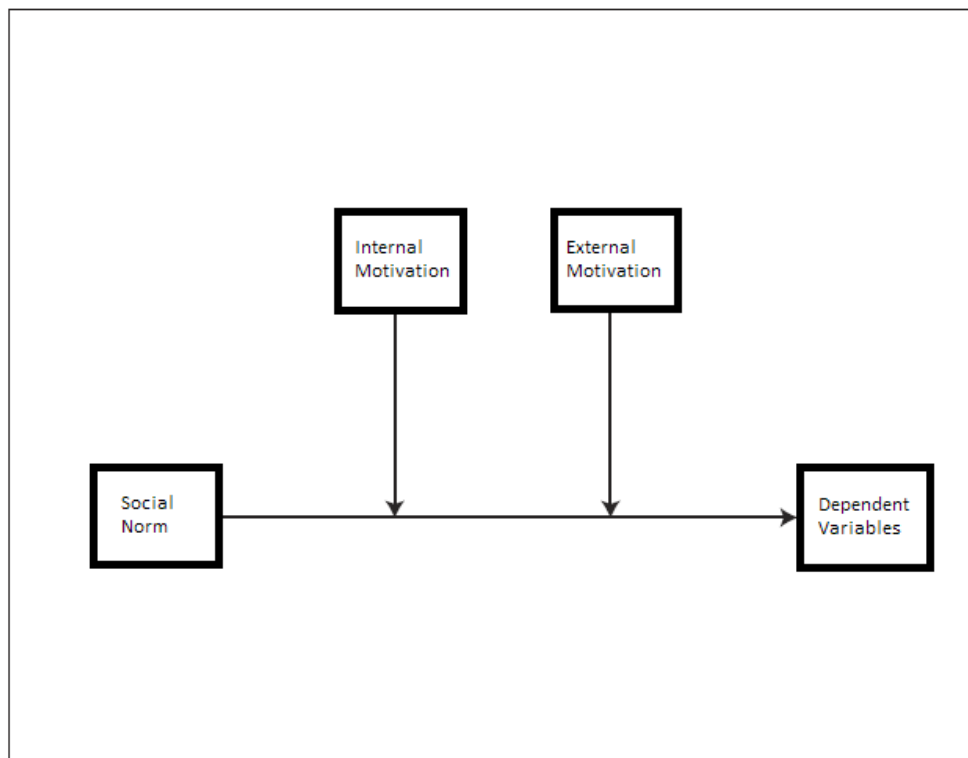


Figure 1: Conceptual model of regression analysis with Internal and External Motivations moderating the effect of Social Norms on the DV.

Comment Ratings. Analyses revealed that the interaction between social norm, internal motivation, and external motivation on the comment ratings was non-significant, $F(5, 126) = 8.88, p = .90$, and neither was any of the interactions between social norm and internal and external motivations individually, $ps > .05$, indicating that neither internal nor external motivations affected the level of prejudice expression in the way participants' responded in their comments, regardless of experimental condition.

Social Distance. The combination of internal and external motivation moderators on social norms showed no interaction effect on the ratings of Social Distance, $F(5, 128) = 31.08, p = .26$. The effect of social norm conditions on Social Distancing was also not individually affected by either internal or external motivations, $ps > 0.05$.

Bias Expressions. The interaction between social norms, internal motivations, and external motivations on Bias Expressions was non-significant, $F(5, 129) = 16.56, p = .93$. Neither internal nor external motivations individually moderated social norm conditions on Bias Expressions, $ps > .05$.

Feeling Thermometer and Positivity Ratings. For the Feeling Thermometer ratings, the combination of internal and external motivations moderated the effect of the social norm conditions ($F(5, 115) = 6.81, p = .04$). Upon further examination of the PROCESS moderation outputs, participants with internal motivations either at the mean, or 1 SD above the mean were significantly affected by the situational norm ($ps < 0.05$). All other levels of external motivations were non-significant ($ps > .05$). This indicates that contrary to the hypothesis, those who were not motivated by external cues to control prejudice were significantly affected by the Anti-Prejudice or Pro-Prejudice norm conditions in their Feeling Thermometer Ratings.

In Positivity Ratings, individual differences in internal and external motivations moderated the effects of social norms, $F(5, 125) = 15.03, p = .03$. Upon closer examination of the conditional effects of the two moderators, participants who rated themselves as not being motivated (i.e. 1 SD below the mean), or averagely motivated to control prejudice due to external cues were significantly affected by the anti-prejudice and pro-prejudice norm conditions ($ps < .05$) regardless of their reported internal motivation levels. Contrary to the hypothesis, participants high in external motivations or internal motivations did not show any effect ($ps > .05$). This finding, however, runs contrary to much prior research on motivation to control prejudice.

IAT D Score. Results revealed that internal and external motivations did not act as moderators on the effects of social norms on the IAT D scores, $F(5, 130) = 2.22, p = 0.36$.

Neither the interaction between social norm and internal motivation ($p = .54$), nor social norm and external motivations ($p = .18$) were significant, indicating that internal and external motivations did not moderate the effects of the social norm on implicit prejudice.

Discussion

The current study examined the impact of social norms established by pro-prejudiced versus anti-prejudiced online comments on perceivers' implicit and explicit prejudicial attitudes toward an out-group. Results of this study demonstrated that reading bigoted online comments allegedly placed by other users increased participant's own prejudicial attitudes, while reading anti-prejudiced online comments had the opposite effect. Although participants only read the online comments and did not interact with any of the fictitious commenters, participants still adopted the group's social norm and adjusted their immediate and subsequent prejudice expressions to more closely match the group's salient prejudicial attitude. These findings emerged even though participants were not instructed or rewarded to respond in a particular manner, with participants given free rein to form their own opinions using the available information in the online article. This open-ended approach allowed a genuine freedom of expression akin to real online comment scenarios.

As the majority of research on social influence on prejudice expression has been conducted using conscious self-report scales (Crandall et al., 2002), the validity of responses may have been jeopardised due to any potential social desirability effects (Greenwald et al., 1998). To account for this, the present study also included implicit reaction time measures that help better understand whether online comments can also impact such automatic or unconscious biases toward social out-groups. This finding supports Blair's (2002) review on the malleability of implicit responses which illustrated the effects that social norms, situational pressures, and social context can have on implicit responses. The use of an online

comment setting in the current study further expands on the literature by demonstrating that implicit attitudes can be influenced by information seen online. The current study showed that reading anti-prejudiced or pro-prejudiced online comments could influence readers to adopt group prejudicial attitudes in their own online comments and that those effects can linger subconsciously, influencing subsequent explicit and implicit discrimination tasks. Unlike some prejudice interventions which require extensive practice and time commitment to see reductions in stereotyping (Kawakami, Dovidio, Moll, Hermsen, & Russin, 2000), the current findings demonstrate the efficiency of online social norms in altering implicit and explicit prejudicial attitudes. Future research could investigate the longevity of norm adoption from online social conditions, and the viability of using this approach as a prejudice reduction strategy.

In addition to assessing implicit and explicit attitudes toward an out-group, the use of qualitative prejudice expression measures (in the form of online comments) also provides an extension of previous work in the area. This finding is interesting because it suggests that the online comments people read can directly impact one's own behaviour and sentiments in an online setting. The present findings also suggest that the influence of social norms can persist even after group members have moved away from the group and onto other tasks. Stangor et al. (2001) found that the social influence of being prejudiced toward Blacks could remain even after a prejudice expression task was completed. Although Kelly and McGrath (1985), and Kelly, Futoran, and McGrath (1990) argue that short-term group members tend to forego group norm maintenance behaviours, the participants of the current study responded with the prejudicial attitudes of their respective online group's social norm. The present findings are also similar to Blanchard et al's. (1994) study in which briefly hearing opinions of other in-group members were sufficient to influence an individual's prejudicial attitudes.

In contrast to expectations, the results did not support the hypothesis that an individual's internal or external motivations would moderate the effects of social norms on online comments and IAT scores. Social Distance and Bias Expression self-report ratings were also not moderated by participants' own motivations to control prejudice. Instead, results indicated that participants' expressions of prejudice and implicit prejudicial attitudes were more affected by the situational norm than their own internal and external motivations to control prejudice.

The same could not be said of the Feeling Thermometer or Positivity ratings, which had inconsistent moderation effects between internal and external motivations and the social norm. In contrast to the hypothesis, participants who reported strong internal motivations to control prejudice did not respond in a more egalitarian manner on either of the measures. Instead, it was those who reported low internal motivations that were unaffected by the social norm in Feeling Thermometer ratings. However, a possible explanation for the internal motivation scale having a null effect could be due to a ceiling effect shown in the distribution of internal motivation questionnaire data ($M = 6.83$ (on a 1 – 9 Likert scale), $SD = 1.89$). It was also hypothesized that people who reported high external motivations would be more affected by their social context in terms of their positivity ratings. Instead, people who reported high external motivations were unaffected by the social norm, whereas those who reported low external motivations had Positivity ratings that were influenced by the social norm. A possible explanation for the inconsistencies in the Feeling Thermometer and Positivity ratings could owe to the two scales directly measuring affection toward Asians, which may have influenced participants to respond with greater socially desirable responses. However, investigations of the data and post-experimental questionnaires did not reveal clear explanations for the inconsistent findings.

Limitations and Implications

This study's findings demonstrate the powerful yet subtle effect that can be created by something as simple as reading online comments. However, there are some limitations to consider that present opportunities for further research. The current study lacked a control group, which made it difficult to determine whether participants' showed both pro-prejudiced and anti-prejudiced responses, or whether only one norm emerges at a time. That is, it is unclear from the present work whether participants only showed reduced prejudicial attitudes (e.g. Blanchard et al., 1991), or if the prejudicial attitudes of participants became more polarized in both anti-prejudiced and pro-prejudiced directions (e.g. Blanchard et al., 1994).

In addition, Stangor et al. (2001) demonstrated that being informed of prejudicial attitudes held by an in-group could influence an individual's prejudicial attitudes for up to a week. This study only investigated a brief time window. Therefore, a time element could be incorporated to determine any lasting effects of online social influences, and what circumstances may diminish the effects of an adopted online norm. Additionally, the inclusion of an internet usage variable may further reveal whether increased internet use may be linked to increased susceptibility of online group norm adoption, or potentially greater immunity towards online social influences.

Finally, unlike real-world online scenarios, participants did not deal with responses to their comments. Although there are situations when people can write responses without any consequences (e.g. leaving a comment on a website and then ignoring replies; online surveys), there are also scenarios where individuals need to deal with replies or have to leave personally identifying information that links back to them (e.g. Google+; Twitter). Snyder, Tanke, and Berscheid (1977) assert that the more others identify an individual a certain way, the greater the chance that individual would adopt the peer assigned identity as their own. If

an individual's prejudicial attitudes can be altered and reinforced by the comments of other online users, it would be beneficial to construct anti-prejudiced norm strategies or intervention methods for reducing prejudicial comments and forming pro-social identities. Future studies should also determine how individuals reply to online comments and whether responses to participants' anti-prejudiced or pro-prejudiced comments would cause participants to strengthen their prejudicial stance, change to adopt the attitudes of the responding commenter, or ignore the follow up completely.

Conclusion

The findings of the current study suggest it is not the empowerment provided by the comfort and lack of accountability that causes online commenters to respond in an anti-social manner, but rather the social norm established in a given online setting that breeds negative outcomes. By continually fostering a group norm that discriminates and stereotypes out-groups, members of that group are more likely to display anti-social behaviours in their everyday lives. The responsibility falls to each user to promote and maintain a positive and constructive environment, free from negative and uncivil remarks. An optimistic outlook can be derived from the current study in terms of how malleable people's attitudes are, and how relatively simple it could be to promote pro-social attitudes. However, a more pessimistic message is that online users can be negatively impacted by the anti-social and harmful messages left by other users. Another benefit of using this subtle normative approach to reducing prejudice is the relatively low investment required. The current study shows strong support for social norm influence as an effective and efficient method for prejudice reduction, as many multi-step prejudice reduction interventions are only supported in principle, but not in action (Hurwitz & Peffley, 1992; Crandall et al., 2002). As long as one participates in such a task, people are likely to conform to the salient group norm. Therefore, instead of taking the drastic approach that the Popular Science website took by dismantling user comments, it

would be beneficial to set strong and clear norms that fit with the creators' visions for their discussion sections. This tactic may require the use of 'community managers', similar to the NY Times (Anderson et al., 2013), to maintain a desired cultural norm. In further support of the ongoing research investigating the effects of social norms in predicting prejudice expressions, the current study demonstrated the powerful effects that reading pro-prejudice or anti-prejudice online comments can have on online groups, and the prejudicial attitudes that can subtly pervade a reader's subconscious, lingering on and creating later expressions of discrimination.

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Appendices

Appendix A: Government Feedback Article

The international student market is New Zealand's fifth largest export, worth \$2.3 billion to the New Zealand economy, the majority of which come from Asia. The New Zealand Ministry of Foreign Affairs and Trade (MFAT), and New Zealand Trade and Enterprise (NZTE) have recently outlined strategies to grow the international student market into a \$5 billion sector by 2025. To reach this goal, Prime Minister John Key recently signed a strategic partnership agreement with China promoting New Zealand as an education destination. Many incentives are in development to achieve this goal, such as the introduction of increased scholarship funding for international tertiary students. The Tertiary Education Minister, Steven Joyce, notes that international students help bolster relationships with other countries by acting as unofficial ambassadors for New Zealand.

New Zealand is often chosen as a study destination due to the employment opportunities New Zealand offers after students graduate, and also because New Zealand offers foreign students the opportunity to apply for permanent residency after their studies. Professor Spoonley of Massey University has found that "migrants contribute far more to [New Zealand's] economy and what they pay in taxes, than what they take." A recent Colmar Brunton survey showed that only half of the respondents saw the increase in Asian immigration as positive, with a third fearing jobs were being taken away by immigrants. This fear was exacerbated by a recent Fairfax investigation into international student services which uncovered a commercial cheating service for Chinese speaking students in New Zealand. The firm provided custom written tertiary papers all the way up to doctorate level theses for a fee. These developments have caused concern and uncertainty as to the benefits

of expanding the international education market and how it could benefit or hinder New Zealand's tertiary system and its students.

Based on the information from this article, please comment on how you feel about the number of international students in New Zealand:

Appendix B: Anti-Prejudiced Comments

1. It's all well and good to bash the Chinese, but it isn't just them and it isn't just the education sector. In addition, this is not a new problem as it has been going on for years. Our economy would be in really bad shape without immigrants, international students, and tourists. These students come from different cultures and with different values: they are invited here.
2. I'm a Chinese. Throughout intermediate, high school and university, I've always hanged out with other Chinese people, despite having been brought up here. Most of my friends were fobs. These people did not cheat, they just tried really hard, and asked people like me for help. They would send their complete essay to me for me to check and grammatical errors or things spell check couldn't pick up, and I would spend an hour fixing bits and pieces here and there and they'd really review it, trying to learn and even questioning some of the changes I'd made. They have bad English and they know it, and they try to learn it because when you're mature enough to be in university, you realise what's good for you.
3. As a Chinese Student myself, I would like to take this opportunity to remind everyone reading the article to keep a level head and refrain from making these comments targeted at all Chinese students. Most Chinese Students in fact are hardworking intelligent people who receive good grades from their own efforts.
4. maybe the umbrella term "Asian" is a little excessive. Seems to be a unfair misleading generalization of a broad ethnic group from which only a minority is responsible.
5. Government has been cutting money to education for years now, choosing to waste it on sport stadiums and more middle-class welfare like working for families and interest free student loans to buy votes. As the money in education dwindles, institutions have to plug

the gaps with international students. The system is broken not the students, national or international.

6. I doubt that cheating at university is limited to any particular ethnic group.
7. There has never been anything wrong with employing a tutor to advise and help a student.
Of course, it has always been wrong to submit work written by others as your own.
Certainly, while different cultures do cheating differently, all cultures contain those who choose to cheat.
8. The foreign fee paying students – most of whom are Chinese – are some of the hardest working students at Uni.
9. If your trying to tell us all that its only Chinese that are cheating then you are naïve
10. I think some parts of this news are just exaggeration and lots of lazy ppl just found a perfect excuse for their gradually losing competitiveness.
11. Are you saying Kiwis don't cheat, or are you glossing over this as a thinly disguised way of Asian bashing?
12. Imagine what you'd think if Oxford kicked all New Zealanders out, because they felt that Oxford should only be for British residents. And if other universities took the same attitude.

Appendix C: Pro-Prejudiced Comments

1. Chinese nationals have generally made up more than 80% of those caught cheating at Lincoln – in one semester alone it was 100% Chinese nationals busted in final exam cheating. innumerable cases of plagiarism, assignment and test cheating though not exclusively but overwhelmingly by Chinese nationals. It reflects the reality of the home environment in the PRC and a cursory examination reveals how obvious this is. Lets be clear it is not an issue with Chinese students per se – it is an issue associated with Chinese nationals and practices that are simply the norm in a endemically corrupt home environment and hence imho is “cultural” time.
2. I hate to seemingly single out one nationality but it is true. There is a real problem with cheating amongst Chinese students. I’ve known Chinese people who’ll tell you this themselves. For a number of reasons bribery and cheating is seen as a necessity of life in China. I don’t want to sound too critical, so let’s try a bit of perspective here. These students come from an extremely competitive society. Add that to the fact that many chinese students studying abroad are from extremely privileged families and are used to not lifting a finger for anything/paying someone else to do it for them. Using somewhat dubious tactics to get ahead of strangers isn’t always frowned upon. In any case, cheating is a universal problem. This article does come across a bit heavy-handed at times but nonetheless, it’s a well documented problem that is very real among the Chinese student population in NZ. If universities and the NZQA don’t take a tougher stance on all cheating, our universities won’t be attracting overseas students from anywhere in the not too distant future.
3. This is not news its been happening ever since Chinese students started coming to other countries to study – this isn’t Chinese bashing either.

4. I hear you, it wouldn't surprise me they seem to just bring in this kind of behavior very disappointing.
5. It wasn't that long ago Asians not just Chinese immigrants that were getting their driver license illegally also. As someone stated "it's the Chinese way". Then let it stay in China and not here in NZ. Those involved should have their qualification stripped.
6. This has been going for years. I go to Lincoln Uni and all the Chinese students copied off each other all the time. It's a huge problem in NZ universities.
7. What we stupid, naïve Kiwis need to realise is this behavior is perfectly normal and acceptable in the countries these students come from. Corruption, bribery and deciet are a way of life in these cultures.
8. I asked lecturers why the exams were made so similar to the previous exams, they explained that the Chinese students tend learn by rote. Given that the course relied on Chinese students to survive, it was best that they were able to pass.
9. There is a lot of cheating that goes on at uni... I'm sure Western students attempt to cheat as well... but every time I have seen it done it has been Chinese students, This year so far I have seen a students search a lectures computer when he steps out of the room to take a phone call, a student receive a marks of zero for answering the previous years assignment questions and I know multiple students who have done exams (normally math) for another student used his photo ID...
10. The deepening relationship with China is going to bring these kinds of problems, more and more. In NZ we value freedom, human rights, human life and we aren't corrupt. China... very different to NZ.
11. I used to tutor at university and am not at all surprised by this – I tutored many Asian students and the majority of them shouldn't have passed the papers I tutored due to their below par English skills and lack of knowledge, however the university turned a blind eye

as they need the money these international students bring. In our Honours year we found there were two different standards – a higher one for NZ natives and a very low standard for the Asian international students – it was incredibly unfair.

12. Yeah no kidding, I go to Vic Uni and it was a known fact then that the Asian students especially the overseas ones were cheating on their essays. How could you not turn up for lectures, nor speak or understand english but still manage to get A's???? it got so obvious you'd see the Asian Students being handed their essays and assignments prior to hand in. What a joke!!! And the uni knew about it but did nothing about it because of the revenue they were making from the Asian Student fees.

Appendix D: IAT Words

Good Words

Kindness

Gift

Love

Sunshine

Beauty

Glory

Bad Words

Sickness

Pain

Vomit

Filth

Ugly

Poison

Appendix E: Explicit Prejudice Questionnaire Factor Loadings*Table 1: Factor loadings of the items in the explicit prejudice questionnaire using an orthogonal varimax rotation with a cut-off of 0.500.*

Item question	Social Distance	Bias Expressions		
It would not bother me if my new flatmate was Asian	.747			
If I had a chance to introduce Asian visitors to my friends and neighbors, I would be pleased to do so.	.732			
I would probably feel somewhat self-conscious dancing with an Asian person in public.	.701			
If an Asian person were put in charge of me, I would not mind taking advice and direction from him or her	.672			
I would not mind it at all if an Asian family with about the same income and education as me moved in next door.	.671			
I would rather not have Asians live in the same apartment building I live in	.668			
I favour open housing laws that allow more racial integration of neighborhoods	.625			
I get very upset when I hear a white person make a prejudicial remark about Asians		.758		
I enjoy a funny racial joke, even if some people might find it offensive		.724		
The government should take decisive steps to override the injustices Asian people suffer at the hands of local authorities		.568		
Asians and white people are inherently equal		.545		
Generally, Asians are not as smart as whites			.681	
It is likely that Asians will bring violence to neighbourhoods when they move in			.620	
I worry that in the next few years I may be denied my application for a job or a promotion because of preferential treatment given to minority group members			.526	
Interracial marriage should be discouraged to avoid the “who-am-I?” confusion which the children feel				
Asian people are demanding too much too fast in their push for equal rights				.673
Some Asians are so touchy about race that it is difficult to get along with them				.598
I think that Asian people look more similar to each other than white people do				.569